ACTA PHYSICA

ACADEMIAE SCIENTIARUM HUNGARICAE

ADIUVANTIBUS
R. GÁSPÁR, L. JÁNOSSY, K. NAGY, L. PÁL, A. SZALAY, I. TARJÁN

REDIGIT
I. KOVÁCS

TOMUS XXXIV

AKADÉMIAI KIADÓ, BUDAPEST
1973

ACTA PHYS. HUNG.

INDEX

Tomus 34

Punyatma Singh: Hydromagnetic Free Convection Flow from a Horizontal Plate: Non-Similar Solutions 1

S. *Sarkar:* On the Trace of the Product of Dirac Matrices Occurring as $A' = A'_i\gamma_i + iA'_5$ 13

Ernst Schmutzer: On the Quantization of the Maxwell Field with Three Polarization Directions 25

S. S. *Rathi, K. Gopalakrishnan, M. K. Machwe* and *J. Kishore:* Fluoremetric Studies of Solutions of Riboflavin and Rhodamine-B 41

S. S. *Rathi, J. Kishore, M. K. Machwe* and *K. Gopalakrishnan:* Transfer of Electronic Excitation Energy in Liquid Solutions 47

J. F. Bitó und *K. G. Antal:* Über einige Parameter der kapazitiven Entladungen 61

J. Ladik and *F. Martino:* Extended Hartree—Fock Crystal Orbital Schemes in Different Approximations 67

I. Mayer: On the Derivation of the Hartree—Fock Equations. II. 83

A. Veres, I. Pavlicsek, M. Csürös and *L. Lakosi:* Nuclear Excitation by γ Rays of Radioactive Sources 97

J. Cunningham: Self Energy Differential Formalism 105

RECENSIONES 111

David Edwards Jr.: Single Particle Energy Level Spectra from a Finite Size Charge Distribution 115

V. V. Demchenko and *N. M. El-Siragy:* A Semiclassical Treatment of Many-Level Molecular Systems 125

Jürgen W. Weil und *Karl W. Kratky:* Aspekte und Anwendungen der Paarkorrelationen in der Physik der Vielteilchensysteme unter besonderer Berücksichtigung der Verhältnisse in Flüssigkeiten und Plasmen, Teil I 139

Jürgen W. Weil: Aspekte und Anwendungen der Paarkorrelationen in der Physik der Vielteilchensysteme unter besonderer Berücksichtigung der Verhältnisse in Flüssigkeiten und Plasmen, Teil II 161

A. Valek: The ^{23}Na(d,p)^{24}Na Reaction at Deuteron Energies 670 and 620 keV 179

Н. И. Жирнов и *И. Е. Сазонов:* О потенциальных кривых двухатомных молекул, допускающих точное решение задачи о предиссоциации вращением 187

Н. И. Жирнов и *И. Е. Сазонов:* О возможности применения обобщенного ВКБ-метода к вычислению положения и ширины квазистационарных уровней двухатомных молекул, предиссоциированных вращением 199

W. D. Rothberger, G. Simon and *G. R. Zeller:* On the Compressed Atom 207

S. *Szegedi:* Investigations on Nuclear Reactions Induced by Protons and Deuterons in Be 215

I. Cseh and *B. Pődör:* Photoelectric and Galvanomagnetic Measurements on p-Type Germanium with Dislocations 225

P. Greguss, J. Ladik, G. Biczó and *S. Suhai:* The Effect of Electric Field on the Electronic Structure of DNA II 231

B. G. Verma and *B. Prasad:* Propagation of Strong Shocks in Self-Gravitating, Conducting Gases in Stellar Models 239

E. Csongor: Measurements of Atmospheric ^{85}Kr Activity at Debrecen (Hungary). II 249

L. Boros: Mit alkalischen Metallen aktiviertes BeO als hoch empfindliches Exoelektronen-Dosimeter 255

K. L. Nagy: Remarks on a Proposal of Field Theories with Non-hermitian Hamiltonians 271

RECENSIONES 277

Z. Horváth: On the Local Commutativity of Quantized Scalar and Vector Fields 281

R. P. Dwivedi: On the Curvature and Torsion of Current Lines Generated Behind a Pseudo-Stationary Curved Shock Wave in Conducting Gases 289

A. N. Konar: Dispersion Relation in Magneto-Plasma with Radiation Damping and Collisions 299

I. Mayer: On the Generalized Brillouin Theorem for Spin Projected Wave Functions ... 305

G. Forgács and *G. Pataki:* Anomalous Dember Effect in the Case of Cylindrical Illumination 311

T. Siklós: Self-Consistent Dynamical Theory of Anharmonic Crystals 327

Nabil A. Eissa, Hanaa A. Sallam and *L. Keszthelyi:* Mössbauer Effect Study of Ancient Egyptian Pottery 337

L. Szalay, G. S. Singhal, E. Tombácz and *L. Kozma:* Light Absorption and Fluorescence of Highly Diluted Chlorophyll Solutions 341

Giorgio Calucci: Deep Inelastic Scattering and Structure of the Nucleon 351

RECENSIONES 357